vertical scanning direction will develop at the position in the image 29 that corresponds to the position PB in the low-density region 29A. Therefore, using the storable fluorescent inspection sheet 21 having stored and recorded the radiation inspection image 28 that has the density pattern shown in Fig. 15, stray light can be inspected no matter what position stray light develops at. In the image 29 obtained from a storable fluorescent inspection sheet 21 like this, if the intersection between the horizontal scanning line, passing through point P8' where the noise 23 disappears, and the boundary line 29C (between the low-density region 29A and the high-density region 29B) is expressed in terms of P7', the intersection P7' represents the position at which stray light develops. Therefore, the position where stray light develops can also be found by use of the storable fluorescent inspection sheet 21 having stored and recorded the radiation inspection image 28 shown in Fig. 15.

IN THE CLAIMS:

Cancel claims 1 and 4 without prejudice or disclaimer.

The Claims are amended as follows:

2 (Amended). A method of inspecting influence of stray light which occurs in a radiation image reader equipped with horizontal scanning means for scanning excitation light on a storable fluorescent sheet, having stored and recorded a radiation image, in a horizontal scanning direction, vertical scanning means for scanning said storable fluorescent sheet in a vertical scanning direction approximately perpendicular to said horizontal scanning direction, and reading means for obtaining an image signal which represents said radiation image by photoelectrically reading said radiation image, stored and recorded in said storable fluorescent sheet, by the horizontal scanning of said excitation light; said inspection method comprising the

steps of:

preparing a storable fluorescent inspection sheet that has stored and recorded a radiation inspection image which has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:20 are arrayed in said horizontal scanning direction;

obtaining an image inspection signal representing said radiation inspection image, by photoelectrically reading said radiation inspection image from said storable fluorescent inspection sheet with said reading means; and

inspecting said influence of stray light, based on an image reproduced from said image inspection signal, wherein a boundary line, in said radiation inspection image, between said low-density region and high-density region is constructed by a straight line and is inclined with respect to said horizontal scanning direction so that it intersects both edges of said radiation inspection image which extend in said vertical scanning direction.

5 (Amended). A storable fluorescent inspection sheet having stored and recorded a radiation inspection image that has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:20 are arrayed in a horizontal scanning direction, wherein a boundary line, in said radiation inspection image, between said low-density and high-density regions is constructed by a straight line and is inclined with respect to said horizontal scanning direction so that it intersects both edges of said radiation inspection image which extend in a vertical scanning direction.

7 (Amended). A method of generating the storable fluorescent inspection sheet as set forth in any one of claims 5 through 6, comprising the steps of:

disposing a radiation shielding member at a position corresponding to said density pattern on a storable fluorescent sheet;

illuminating said storable fluorescent sheet, on which said shielding member has been disposed, with a dose of radiation that corresponds to said contrast difference; and

storing and recording said radiation inspection image in said storable fluorescent sheet, by repeating the disposition of said radiation shielding member and the illumination of said radiation, with respect said storable fluorescent sheet until said density pattern is obtained.

8 (Amended). A method of generating the storable fluorescent inspection sheet as set forth in any one of claims 5 through 6, comprising the steps of:

disposing a radiation transmittable member at a position corresponding to said density pattern on a storable fluorescent sheet, the radiation transmittable member having a radiation transmission factor which corresponds to said contrast difference; and

storing and recording said radiation inspection image in said storable fluorescent sheet, by illuminating said storable fluorescent sheet, on which said radiation transmittable member has been disposed, with a dose of radiation that corresponds to said contrast difference.

Claims 9-11 are added as new claims.

9. A method of inspecting influence of stray light which occurs in a radiation image reader equipped with horizontal scanning means for scanning excitation light on a storable fluorescent sheet, having stored and recorded a radiation image, in a horizontal scanning direction, vertical scanning means for scanning said storable fluorescent sheet in a vertical scanning direction approximately perpendicular to said horizontal scanning direction, and

reading means for obtaining an image signal which represents said radiation image by photoelectrically reading said radiation image, stored and recorded in said storable fluorescent sheet, by the horizontal scanning of said excitation light; said inspection method comprising the steps of:

preparing a storable fluorescent inspection sheet that has stored and recorded a radiation inspection image which has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:50 are arrayed in said horizontal scanning direction;

obtaining an image inspection signal representing said radiation inspection image, by photoelectrically reading said radiation inspection image from said storable fluorescent inspection sheet with said reading means; and

inspecting said influence of stray light, based on an image reproduced from said image inspection signal.

10. A storable fluorescent inspection sheet having stored and recorded a radiation inspection image that has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:50 are arrayed in a horizontal scanning direction.

11. A method of generating a storable fluorescent inspection sheet having stored and recorded a radiation inspection image that has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:20 are arrayed in a horizontal scanning direction comprising:

disposing a radiation shielding member at a position corresponding to said density pattern

on a storable fluorescent sheet;

illuminating said storable fluorescent sheet, on which said shielding member has been disposed, with a dose of radiation that corresponds to said contrast difference; and

storing and recording said radiation inspection image in said storable fluorescent sheet, by repeating the disposition of said radiation shielding member and the illumination of said radiation, with respect said storable fluorescent sheet until said density pattern is obtained.

IN THE ABSTRACT OF DISCLOSURE:

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

The inspection method comprises: preparing a storage fluorescent inspection sheet that has stored and recorded a radiation inspection image which has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:20 are arrayed in a horizontal scanning direction; obtaining an image inspection signal representing the radiation inspection image, by photoelectrically reading the radiation inspection image from the storable fluorescent inspection sheet; and inspecting the influence of stray light, based on an image reproduced from the image inspection signal. An inspection image plate has contrast differences of high-density and low-density regions of at least 1:20.